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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,220	01/09/2006	Paul Dischamp	0579-1096	5135

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EXAMINER	
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ART UNIT	PAPER NUMBER
2887	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,220	DISCHAMP ET AL.	
	Examiner	Art Unit	
	DANIEL WALSH	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Fallah (US 2002/0047781), as cited in the previous Office Action.

Re claims 1-2, Fallah discloses a secure electronic entity (1, 30) characterized in that it contains means for measuring time (13,34) and in that it comprises means for certifying an item of data relating to a date or a duration, said certification means receiving (13, 34) from said time measuring means information on said date and producing data certifying said item of data relative to a duration intended for an external entity (FIG. 1-2, and paragraphs [0022] and [0025], and the central processing unit is capable of detecting time and certification of time data is recorded). The Examiner notes that the detector 30 (for example) is part of the tag/card. Certification is interpreted to occur for example, via the secret code from an external unit that is verified by the CPU 13.

Re claim 3, Fallah discloses certification means are adapted to certify the authenticity of duration (paragraphs [0019], [0025-0026]. [0029], and [0031]). Fallahs' card can communicate date with the external unit once the unit provides an authentication code; hence the card/tag provides authenticated data.

Re claim 4, Fallah discloses certification means are adapted to certify that an action has been effected in a given time period (see paragraph [0029] which certifies temperature for a given time period).

Re claim 5, Fallah discloses synchronization means (see paragraph [0019] where the card/tag can synchronize itself to the external unit).

Re claim 6, Fallah discloses authentication means (see paragraph [0026] and [0031] where a password or cryptographic means allow access to card/tag memory).

Re claims 7-8, Fallah discloses time measure means are adapted to supply a measurement of time when the entity is not supplied with power by an external power supply and not supplied with electrical power (see paragraphs [0027-0028] where the card/tag is enabled to take measurements at different time intervals, the time stamp saying when the system is powered to take data, for example before the hour not powered, for the time powered, etc.).

Re claim 9, Fallah discloses time measurement means are adapted to supply a time measurement independent of an external clock (see paragraph [0029] where the time is provided by the card/tag).

Re claim 10, Fallah discloses time measuring means includes means for comparing two dates (see paragraph [0019], [0025] and [0029 where data can be compared).

Re claims 18-20, Fallah teaches a portable microcircuit card (see paragraphs [0002], [0005], [0025] and [0029]), where the Examiner has broadly interpreted a card/tag as a relatively planar device, and hence as no further structural limitations have been claimed, the Examiner has interpreted the teachings of Fallah to include that of a card/tag.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fallah, as discussed above, in view of Horvat et al. (US 7,036,018).

Re claims 11-17, the teachings of Fallah have been discussed above.

Fallah fails to teach a one subsystem comprising a capacitive component having a leak across its dielectric space, means for coupling the component to an electrical power supply for it to be charged by the supply, and means for measuring the residual charge in the capacitive component, said residual charge being at least in part representative of the time that has elapsed since the capacitive component was decoupled from the electrical power supply, means for measuring the residual charge are part of the time measuring means, capacitive component as a capacitor implemented in the MOS technology and whose dielectric space consist of Silicon

Oxide, means for measuring the residual charge comprising a FET having an insulative layer, in that the capacitive component includes and insulative layer, and that the thickness of the insulative layer of the FET is much greater than the thickness of the insulative layer of the capacitive component, the thickness of the insulative layer of the capacitive component is from 4-10nm, the inclusion of two subsystems each comprising a capacitive component having a leak across its dielectric space, means for coupling said capacitive component to an electrical power supply for it to be charged by said electrical power supply, and means for measuring the residual charge in the capacitive component, said residual charge being at least in part representative to the time that has elapsed since the capacitive component was decoupled from the electrical power supply, said subsystems comprising capacitive components having different leaks across their respective dielectric space, and that said secure entity further includes means for processing measurement of the respective residual charges in the capacitive components to extract from said measurements information substantially independent of heat input to said entity during the elapsed time, and that said processing means include software for calculating a predetermined function for determining said information as a function of said measurements substantially independent of the heat input.

Horvat et al. teaches a one subsystem comprising a capacitive component having a leak across its dielectric space, means for coupling said capacitive component to an electrical power supply for it to be charged by said electrical power supply, and means for measuring the residual charge in the capacitive component, said residual charge being at least in part representative of the time that has elapsed since the capacitive component was decoupled from the electrical power supply (see C:6), means for measuring the residual charge are part of said time measuring

means (see C: 6 lines 4-38), that capacitive component is a capacitor implement in MOS technology and whose dielectric space includes silicon oxide (C: 6 lines 21-67), means for measuring the residual charge comprising a FET having an insulative layer, that the capacitive component has a insulative layer and in that the thickness of the insulative layer of the FET Is much greater than that of the capacitive component (C: 6, lines 39-67 and C; 7, lines 1-40), the thickness of the insulative layer of the capacitive component 4-10nm (C: 6, lines 39-67 where it is well within the ordinary skill in the art to select a thickness based on the desired charge as discovering an optimum value of a result effective variable involves only routine skill in the art, especially noting that manipulating the thickness produces expected results), two subsystems each comprising a capacitive element having a leak across dielectric space, means for coupling, means for measuring, the residual charge being at least in part representative of the time that has elapsed, the subsystems comprising capacitive components having different leaks, and that the secure entity includes means for processing measurements of the respective residual charges in the capacitive components to extract from said measurements information independent of the heat input to the entity during the elapsed time (C: 6, lines 39-67, and C: 7, lines 1-40), and that the processing means includes software (C: 6, where the system has software that is controlled by the processor needed to operate the card/tag).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fallah with those of Horvat.

One would have been motivated to do this in order to provide a more reliable label by allowing carrying a charge after disconnection, and also enhanced security by tamper detection.

Response to Arguments

6. Applicant's arguments filed have been fully considered but they are not persuasive.

In response to the Applicants argument that as Fallah is discussing a detector, it is not a secure entity. The Examiner disagrees. The tag/card is broadly interpreted as a secure entity, as it has security means, and also as it is believed to be secure in that it is interpreted as solidly constructed (physically secure). Further, as it is an electronic device, it is broadly interpreted as somewhat secure, as it is electrical and has electrical processing components and communicates electrically.

In response to the Applicants argument that Fallah does not certify the item of data relative to time, the Examiner disagrees. The item of data is interpreted as certified relative to time, as information is stored indicating the date and time of the measurement in addition to the values.

Conclusion

7. **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL WALSH whose telephone number is (571)272-2409. The examiner can normally be reached on M-F 9am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL WALSH/
Primary Examiner, Art Unit 2887